EVALBRIEF: SYSTEMS OF CARE

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Findings From the 2004 Management Information Systems and Technology Survey

The New Freedom Commission Report (NFC, 2003) states that advanced communication and information technology will play an important role in a transformed mental health system by empowering consumers and families and providing tools for providers to deliver services emphasizing best practices. The Commission specifically mentions the need for a complete and accurate health record with electronic linkage across multiple service systems. Integrated electronic information systems are a crucial element of comprehensive and coordinated service provision and serve as a source of information for continuous quality improvement (e.g., by recording and enhancing adherence to evidence-based practices.

The development and use of administrative data in systems of care present both challenges and opportunities for the communities. One component of administrative data emphasizes information about services that children participating in systems of care receive and costs associated with these services. Services and costs data usually are captured in the management information systems (MIS) of a system of care and other agencies in the community. Information is needed about every service children and families receive (regardless of agency or organization providing the service) to understand service utilization patterns, the cost of services, and their relationship to outcomes. Cross-agency data availability is especially relevant for systems of care that serve children who are likely to have contacts with multiple agencies such as juvenile justice and child welfare.

The Commission also states that telehealth technologies hold great promise for improving access to mental health care in many rural, remote, and other underserved areas. Telehealth is defined as the use of electronic information and telecommunication technologies to support long-distance clinical health care, patient and professional health-related education, and public health and health administration (DHHS, 2002).

Study Highlights

- ***The majority of communities capture data in management information systems (MIS) on services they provide; however, these service data are captured more often for traditional and billable services than for support services.***
- ***The majority of surveyed grant communities can access data collected by at least one child-serving agency; generally, these communities have used data obtained through this data-sharing vehicle.***
- ***Information sharing was the most often reported strategy to facilitate cross-agency data integration; confidentiality concerns were the most often cited barrier.***
- ***One-third of surveyed communities reported the use of at least one telehealth technology to provide services their clients.***

This study was undertaken as part of the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families program. The study included the administration of a survey to participating system-of-care communities to examine (a) data sharing and integration practices across communities and child-serving agencies, and (b) the use of telehealth technologies as a means of providing services to participating children. Survey results are summarized here and conclusions and recommendations stemming from the findings are also presented.

Methods

A Web-based MIS and Technology (MIS&T) Survey was designed and conducted in 2004 by ORC Macro to assess (a) the degree of data integration across various agencies in system-of-care communities, (b) the completeness of services and costs data captured in grantee databases, and (c) the amount and type of technology use across system-of-care communities. The survey was administered to system-of-care communities funded between 1999 and 2003. In an effort to understand cross-agency data integration or sharing, communities were asked about their access to data collected by various child-serving agencies (e.g., mental health, social service, juvenile justice, education, physical health, or other agencies/organizations), as well as their utilization of technology to provide services for participating children.

Findings

Access to Data

Preliminary results (n = 36) indicated that 61.1% of system-of-care communities can access at least one MIS outside of their own agency. The majority of the communities (90.9%) with access to data from other agencies have used at least one of these databases. Just over half of respondents (54.1%) indicated they can access the Medicaid records of the children they serve. In terms of the communities' access to data from specific agencies:

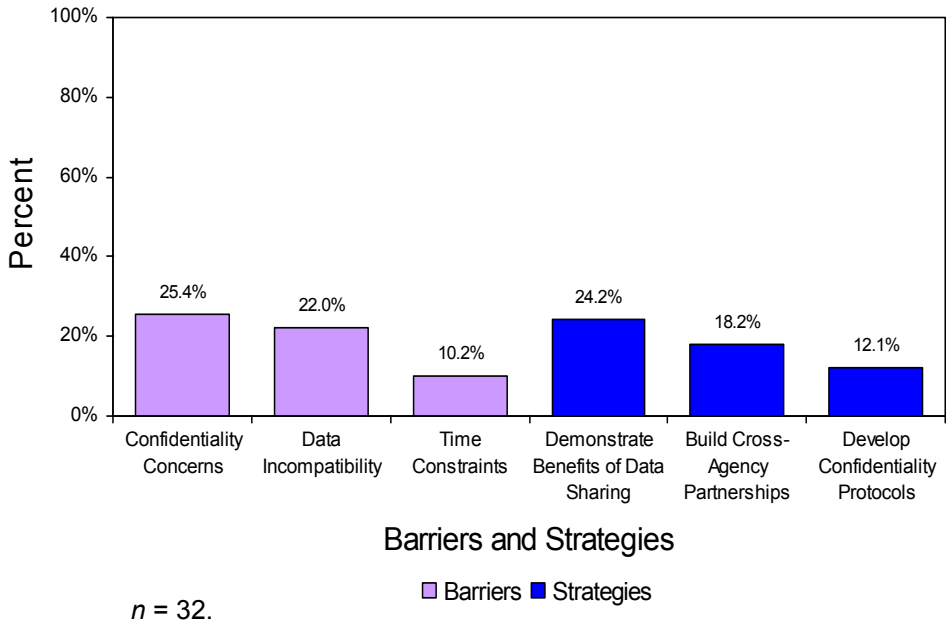
- 57.1% of the communities can access mental health data; 95% of these have used the information.
- Approximately a quarter can access social service data; 88.9% of these have used these MIS's.
- Less than one-fourth (22.6%) can access juvenile justice data; all have used the data obtained through these means.

Only six communities indicated that they have access to education data; five of these have used the obtained data. A little more than 10% of the communities can access physical health data; however, only one community has used these data.

Barriers and Strategies

Not all systems of care have access to the databases of other child-serving agencies. However, the majority of the communities without MIS access have made attempts to integrate data with other child-serving agencies. To understand factors that may influence access to the MIS of other agencies, communities were asked what types of successful strategies or barriers

Figure 1
Site-Reported Barriers and Strategies in Cross-Agency Data Integration



n = 32.

they identified in the process of integrating data. The top three barriers and strategies described by communities are depicted in Figure 1.

The most frequently reported barrier to integrating or sharing data given by communities was confidentiality issues regarding release of child-specific information. Respondents indicated that the Health Insurance Portability and Accountability Act (HIPAA) and other privacy regulations make child-serving agencies reluctant to share data. The incompatibility of cross-agency data and/or platforms also presents difficulties for combining specific child records. Respondents also indicated that gaining access to the data of various child-serving agencies is a time-consuming process that often requires staff specially trained to work with various databases.

The most common strategy that system-of-care communities used to ensure information sharing was demonstrating the benefits of integrated data to relevant stakeholders (e.g., presenting descriptive statistics for specific populations they serve using data collected as part of their evaluation). Another common strategy was building overall cross-agency partnerships. Specifically, 18.2% of communities reported that successful data sharing depends upon close cross-agency collaboration in service areas; more generally, developing good rapport with partner agencies enhances the success of these efforts. Another important strategy described by the respondents was setting clear rules and procedures regarding informed consents, privacy, and data transfers.

Services

In addition to cross-agency integration questions, the MIS&T Survey assessed various services available to children in system-of-care communities and whether the information about these services is captured in the local MIS. The survey listed 22 typical services usually

Table 1
Array of Services Provided in the System-of-Care Communities

Service	Percent of Communities Offering This Service	Percent of Communities Offering and Capturing This Service in MIS
Case Management	94.4%	70.7%
Assessment/Evaluation	88.9%	75.0%
Individual Therapy	86.1%	77.5%
Family Therapy	86.1%	74.2%
Family Support Services	85.7%	46.7%
Transportation	85.7%	36.6%
Crisis Stabilization	83.3%	80.1%
Medication Treatment/Monitoring	83.3%	76.7%
Flexible Funds	82.9%	37.9%
Group Therapy	80.6%	82.8%
Respite Care	80.0%	42.9%
Recreational Activities	80.0%	39.3%
Family Preservation	72.2%	61.5%
Day Treatment	68.6%	83.2%
Inpatient Hospitalization	68.6%	70.8%
Therapeutic Foster Care	62.9%	68.2%
Behavioral Aid	62.9%	72.7%
Residential Treatment Center	60.0%	81.0%
Transition Services	57.1%	50.1%
Independent Services	54.3%	57.8%
Therapeutic Group Home	48.6%	76.3%
Residential Therapeutic Camp	34.3%	66.8%

n = 36.

offered by community mental health centers and asked respondents to identify whether these services were offered in their community. Table 1 shows the percentage of communities that offered each type of service and the percentage of sites that tracked these services in a MIS. Over 80% of the communities captured data on day treatment, group therapy, residential treatment center, and crisis stabilization services. The least likely services to be captured in the databases were recreational activities (39.3%), flexible funds (37.9%), and transportation (36.6%).

Utilization of Telehealth Technologies

The MIS&T also assessed how extensively telehealth technologies were utilized by system-of-care grant communities. Overall, 30.6% of the surveyed communities reported using at least one telehealth technology to serve their clients; 36.4% reported that at least one of these services is Medicaid reimbursable.

Almost 14% of communities ensure continuity of care by using e-mail to send appointment reminders to children and families. Behavioral assessments conducted via video-conferencing and long-distance case conferencing are employed by over 11% of surveyed communities. One of the *least* frequently used telehealth technologies is remote therapy, with only 2.8% of communities employing it to provide services to children.

Conclusions and Recommendations

In conclusion, while the majority of system-of-care communities were successful in ensuring data sharing across various child-serving sectors, barriers to data integration still exist. The results indicate that system-of-care communities should be provided with technical assistance on cross-agency data integration early in the funding cycle. Assistance should include training on HIPAA and other health information privacy laws, and rules and regulations relevant for other child-serving agencies such as juvenile justice and child welfare. This will assist the communities in developing comprehensive informed consent procedures in compliance with relevant privacy regulations. Grant communities will also benefit from training and funding to resolve some of the technical difficulties associated with cross-platform data integration.

The findings indicate that telehealth technologies hold a lot of potential for improving access to mental health care in underserved areas (DHHS, 2002). Almost one-third of surveyed systems of care employ telehealth technologies to ensure service provision to the children and families in their communities. With the increase in utilization of telehealth technologies nationwide, there are growing concerns about State jurisdiction and enforcement, provider cross-State licensure, and privacy and safety issues (DHHS, 2002). The development of a repository of telehealth-related publications and data, relevant to systems of care, would help ensure that communities have access to up-to-date and relevant information on the use of these technologies with the populations they serve.

References

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